

What is claimed is

- 1 . A multilayer article comprising (A) a first adhesion resistant layer, and (B) a core layer having a first face in direct contact with the first adhesion resistant layer, the core layer comprising a crosslinkable polymer of a composition such that interlayer peel
5 strength of a coextruded composite product of the core layer with the first adhesion resistant layer is less than about 40 g/cm, in which multilayer article the core layer is intercrosslinked to the first adhesion resistant layer across the first face by bonds generated by actinic radiation penetrated through the first adhesion resistant layer into the core layer.
- 10 2 . The multilayer article of claim 1 in which the core layer is crosslinked by bonds generated by actinic radiation penetrated through the first adhesion resistant layer.
- 3 . The multilayer article of claim 1 in which the first adhesion resistant layer consists essentially of a copolyester thermoplastic elastomer.
- 15 4 . The multilayer article of claim 1 in which the first adhesion resistant layer consists essentially of a fluoropolymer.
- 5 . The multilayer article of claim 4 in which the fluoropolymer is a copolymer of ethylene and chlorotrifluoroethylene and the core layer consists essentially of polyethylene.
- 20 6 . The multilayer article of claim 1 in which the core layer comprises a plurality of strata each stratum of which is laminated to an adjacent stratum effectively to prevent peel delamination of the core layer.
- 25 7 . The multilayer article of claim 6 in which at least one stratum has a composition different from another stratum, provided that the stratum adjacent to the first adhesion resistant layer consists essentially of a crosslinkable polymer of a composition such that interlayer peel strength of a coextruded composite product of the stratum adjacent to the first adhesion resistant layer with the first adhesion resistant layer is less than about 40 g/cm.
- 8 . The multilayer article of claim 1 in which the core layer has a second face on a side opposite the first face and the article further comprises a second adhesion

resistant layer of composition such that interlayer peel strength of a coextruded composite product of the core layer with the second adhesion resistant layer is less than about 40 g/cm, in which multilayer article the core layer is intercrosslinked to the second adhesion resistant layer across the second face by bonds generated by actinic radiation
5 penetrated through the second adhesion resistant layer into the core layer.

9 . The multilayer article of claim 8 in which the core layer is crosslinked by bonds generated by actinic radiation penetrated through the first adhesion resistant layer and by actinic radiation penetrated through the second adhesion resistant layer.

10 . The multilayer article of claim 9 in which the core layer comprises a
10 plurality of strata each stratum of which is adhered to an adjacent stratum effectively to prevent peel delamination of the core layer.

11 . The multilayer article of claim 10 in which at least one stratum has a composition different from another stratum, provided that the stratum adjacent to the first adhesion resistant layer consists essentially of a crosslinkable polymer of a composition
15 such that interlayer peel strength of a coextruded composite product of the stratum adjacent to the first adhesion resistant layer with the first adhesion resistant layer is less than about 40 g/cm, and provided that the stratum adjacent to the second adhesion resistant layer consists essentially of a crosslinkable polymer of a composition such that interlayer peel strength of a coextruded composite product of the stratum adjacent to the
20 second adhesion resistant layer with the second adhesion resistant layer is less than about 40 g/cm.

12 . The multilayer article of claim 8 in which the second adhesion resistant layer has a composition identical to that of the first adhesion resistant layer.

13 . A method of making a multilayer article comprising the steps of
25 (A) providing a first adhesion resistant layer and a core layer having a first face and comprising a crosslinkable polymer of a composition such that interlayer peel strength of a coextruded composite product of the core layer with the first adhesion resistant layer is less than about 40 g/cm,

(B) placing the first adhesion resistant layer coextensively in direct contact with the first face of the core layer to form a composite having the adhesive resistant layer positioned to define a first side of the composite,

5 (C) heating the composite to an elevated temperature above the melting points of the first adhesion resistant layer and the crosslinkable polymer,

(D) while maintaining the composite at the elevated temperature, compressing the first adhesion resistant layer and the core layer together with a pressure of at least about 0.1 MPa,

10 (E) radiating the composite from a source positioned proximate to the first side with ultraviolet radiation comprising wavelengths in the range of about 170-220 nm in an amount effective to form intercrosslinking bonds at the first face between the first adhesion resistant layer and the core layer.

14 . The method of claim 13 in which the ultraviolet radiation comprises wavelengths in the range of about 170 – 400 nm and is effective to crosslink the
15 crosslinkable polymer of the core layer.

15 . The method of claim 14 which further comprises cooling the composite to a temperature below the melting points while maintaining the first adhesion resistant layer and the core layer in mutual direct contact prior to radiating.

16 . The method of claim 13 in which the core layer comprises a plurality of
20 strata each stratum of which is adhered to an adjacent stratum effectively to prevent peel delamination of the core layer.

17 . The method of claim 13 in which the core layer defines a second face opposite the first face and which method further comprises providing a second adhesion resistant layer such that interlayer peel strength of a coextruded composite product of the
25 core layer with the second adhesion resistant layer is less than about 40 g/cm, placing the second adhesion resistant layer coextensively in direct contact with the second face of the core layer to form a composite having the second adhesive resistant layer positioned to define a second side of the composite opposite the first side, heating the composite to an elevated temperature above the melting points of the second adhesion resistant layer
30 and the crosslinkable polymer, while maintaining the composite at the elevated

temperature, compressing the second adhesion resistant layer and the core layer together with a pressure of at least about 0.1 MPa, radiating the composite from a source positioned proximate to the second side with ultraviolet radiation comprising wavelengths in the range of about 170-220 nm in an amount effective to form

5 intercrosslinking bonds between the second adhesion resistant layer and the core layer at the first face.

18 . The method of claim 17 in which the ultraviolet radiation comprises wavelengths in the range of about 170 – 400 nm and is effective to crosslink the crosslinkable polymer of the core layer.

10 19 . The method of claim 17 in which the core layer comprises a plurality of strata each stratum of which is adhered to an adjacent stratum effectively to prevent peel delamination of the core layer.